

WHAT IS CLAIMED IS:

1. An illumination device comprising:
  - a light guide plate;
  - 5 an intermediate light guide disposed along one side face of the light guide plate; and
  - a light emitting element disposed at an end face in the lengthwise direction of the intermediate light guide,
  - wherein the side face of the light guide plate serves as
  - 10 a light incident face from which light is introduced, light emitted from the light emitting element is introduced into the light guide plate through the intermediate light guide and the light incident face, and the light propagating inside the light guide plate is emitted from one surface of the
  - 15 light guide plate, and
  - wherein the intermediate light guide protrudes from the light guide plate in a direction along the light incident face of the light guide plate toward the light emitting element, a side face of the intermediate light guide opposing
  - 20 the side face of the light guide plate serves as an emergent face from which the light from the light emitting element emerges toward the light guide plate, and an outer side face of the intermediate light guide remote from the emergent face serves as a reflecting face for reflecting the light
  - 25 propagating inside the intermediate light guide.

2. An illumination device according to claim 1, wherein the outer side face of the intermediate light guide is

provided with a prism face having a plurality of grooves of wedge-shaped cross section, and a reflective film formed on the prism face.

5           3. An illumination device according to claim 1, wherein the outer side face of the intermediate light guide is provided with an uneven face having a plurality of minute irregularities, and a reflective film formed on the uneven face.

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          4. An illumination device according to claim 2 or 3, wherein the prism face or the uneven face of the intermediate light guide is provided distant from the end face of the intermediate light guide.

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          5. An illumination device according to claim 4, wherein the prism face or the uneven face on the outer side face of the intermediate light guide extends from a position at a distance within the range of -1 mm to +0.5 mm from an  
20 extension line of an end face of the light guide plate close to the light emitting element, the extension line reaching the outer side face of the intermediate light guide, when the symbol "-" indicates a side offset from the extension line toward the light emitting element, and the symbol "+"  
25 indicates a side offset from the extension line away from the light emitting element.

          6. An illumination device according to claim 4, wherein

the prism face or the uneven face on the outer side face of the intermediate light guide extends from a position at a distance within the range of 0.5 mm to +0.5 mm from an extension line of an end face of the light guide plate close to the light emitting element, the extension line reaching the outer side face of the intermediate light guide, when the symbol "-" indicates a side offset from the extension line toward the light emitting element, and the symbol "+" indicates a side offset from the extension line away from the light emitting element.

7. An illumination device according to claim 4, wherein the prism face or the uneven face on the outer side face of the intermediate light guide extends from an extension line of an end face of the light guide plate close to the light emitting element, the extension line reaching the outer side face of the intermediate light guide.

8. An illumination device according to claim 2, wherein the pitch of the grooves exponentially or quadratically decreases away from the light emitting element.

9. An illumination device according to claim 2, wherein the depth of the grooves exponentially or cubically increases away from the light emitting element.

10. An illumination device according to claim 2, wherein each of the grooves has a pair of inclined faces for

reflecting light, and the angle defined by the inclined faces is within the range of 105° to 115°.

11. An illumination device according to claim 1,  
5 wherein the other surface of the light guide plate is provided with a plurality of prism grooves arranged in stripes in plan view and having gently inclined faces and sharply inclined faces inclined more sharply than the gently inclined faces.

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12. An illumination device according to claim 11, wherein the extending direction of the prism grooves in the light guide plate intersects the light incident face.

13. A liquid crystal display device comprising:  
15 an illumination device; and  
a liquid crystal display unit to be illuminated by the illumination device,  
wherein the illumination device comprises:  
20 a light guide plate;  
an intermediate light guide disposed along one side face of the light guide plate; and  
a light emitting element disposed at an end face in the lengthwise direction of the intermediate light guide,  
25 wherein the side face of the light guide plate serves as a light incident face from which light is introduced, light emitted from the light emitting element is introduced into the light guide plate through the intermediate light guide

and the light incident face, and the light propagating inside the light guide plate is emitted from one surface of the light guide plate, and

wherein the intermediate light guide protrudes from the  
5 light guide plate in a direction along the light incident face of the light guide plate toward the light emitting element, a side face of the intermediate light guide opposing the side face of the light guide plate serves as an emergent face from which the light from the light emitting element  
10 emerges toward the light guide plate, and an outer side face of the intermediate light guide remote from the emergent face serves as a reflecting face for reflecting the light propagating inside the intermediate light guide.